

OPERATING INSTRUCTIONS

SOLID-STATE REVERBERATION AMPLIFIER

SANSUI RA-700



Sansui

SANSUI ELECTRIC CO., LTD.

Congratulations on joining the thousands of proud, satisfied owners of quality stereo components from Sansui.

The RA-700 reverberation amplifier is a unique component to add a new thrilling pleasure to your stereo enjoyment. It can provide reverberation effects to all the program sources set up on your existing stereo control amplifier, including the playback from, recording on a tape deck, and dubbing between two tape decks. The continuously controllable reverberation time, multicolored reverberation indicator and other new ideas have been engineered into the RA-700.

This manual has been prepared to guide you in connecting and operating the reverberation amplifier correctly. Please read it carefully before operating the amplifier and retain it for future reference.

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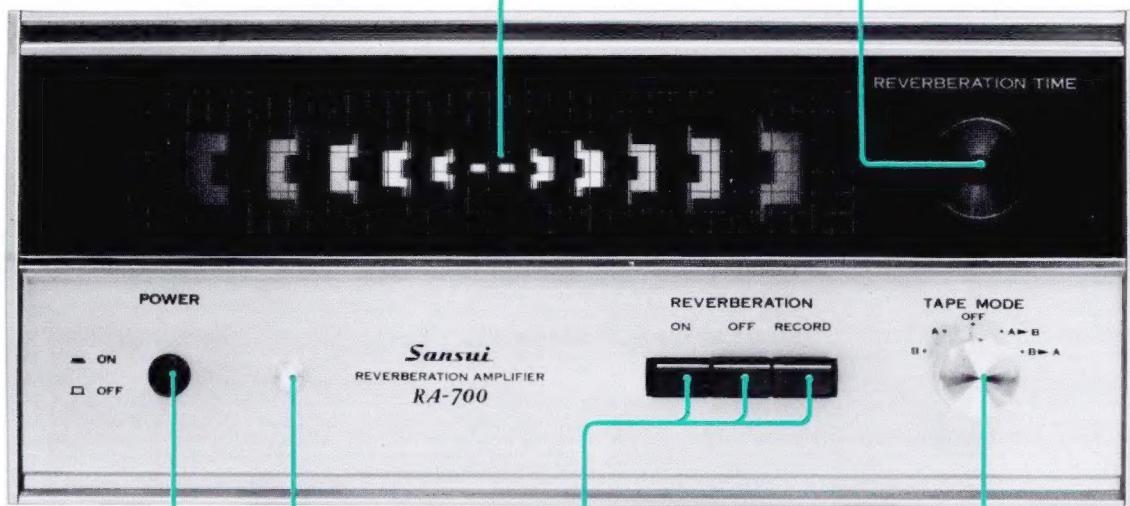
SWITCHES AND CONTROLS

REVERBERATION INDICATOR

The reverberation indicator is illuminated when the Reverberation On or Record button is depressed. The two rainbows, one inverted, draw sharply and distinctly apart as the reverberation time is shortened.

REVERBERATION TIME CONTROL

Use this control to adjust the reverberation time while watching the reverberation indicator. To lengthen the time, turn it clockwise; to shorten the time, turn it counterclockwise.



POWER SWITCH

Push this switch once to turn the power on; push it again to turn the power off.

POWER INDICATOR

The power indicator is lit when the Power switch is turned on. It remains lit while the amplifier is on.

REVERBERATION PUSHBUTTONS

ON—Depress this button to add reverberation to any program source. If it is depressed during the recording process, the recording is made without reverberation but only the sound from the speakers is reverberated.

OFF—Depress this button if you want not to add reverberation during the recording process or while listening to records, radio broadcasts or tapes.

RECORD—Depress this button to add reverberation to the sound of the recording.

TAPE MODE SELECTOR

B—Use this position to record on, or play back through, the tape deck connected to the TAPE DECK B jacks.

A—Use this position to record on, or play back through, the tape deck connected to the TAPE DECK A jacks.

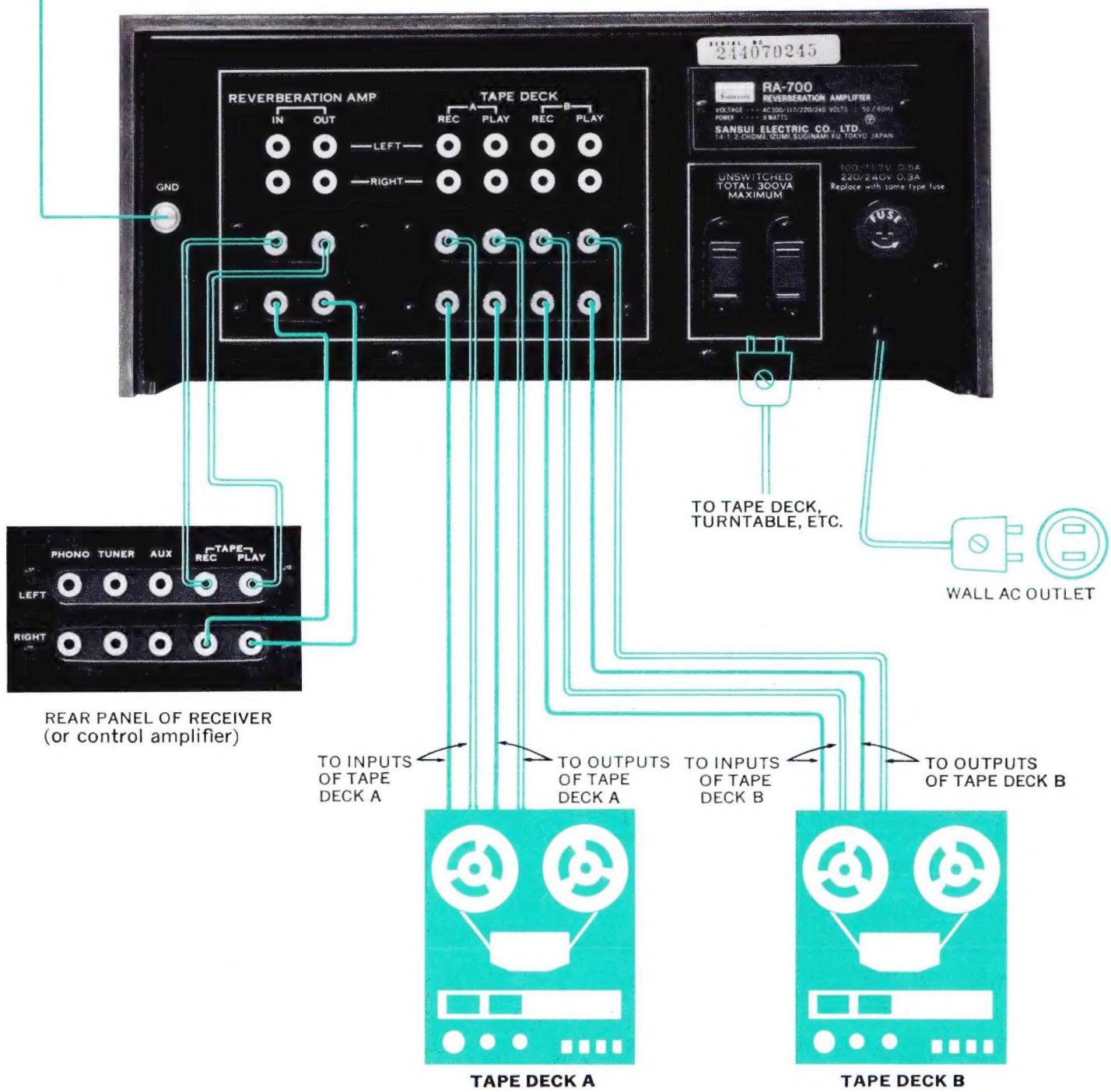
OFF—Use this position to provide reverberation effects to a program source set up on the receiver (or control amplifier) connected to the RA-700. With the selector switched to this position, the reverberation amplifier is disconnected from the tape deck circuits.

A>B—Use this position to record from the tape deck A to the tape deck B.

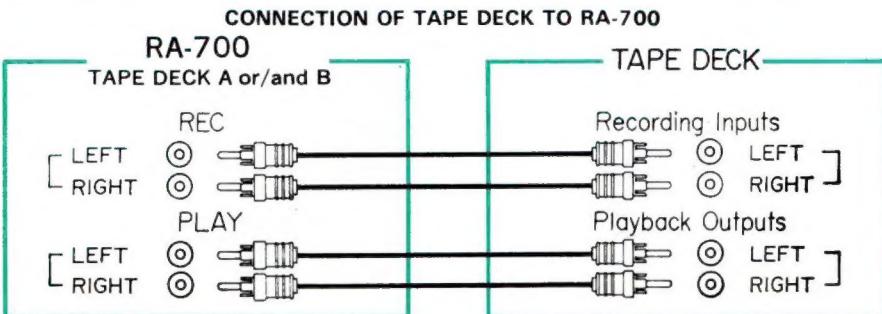
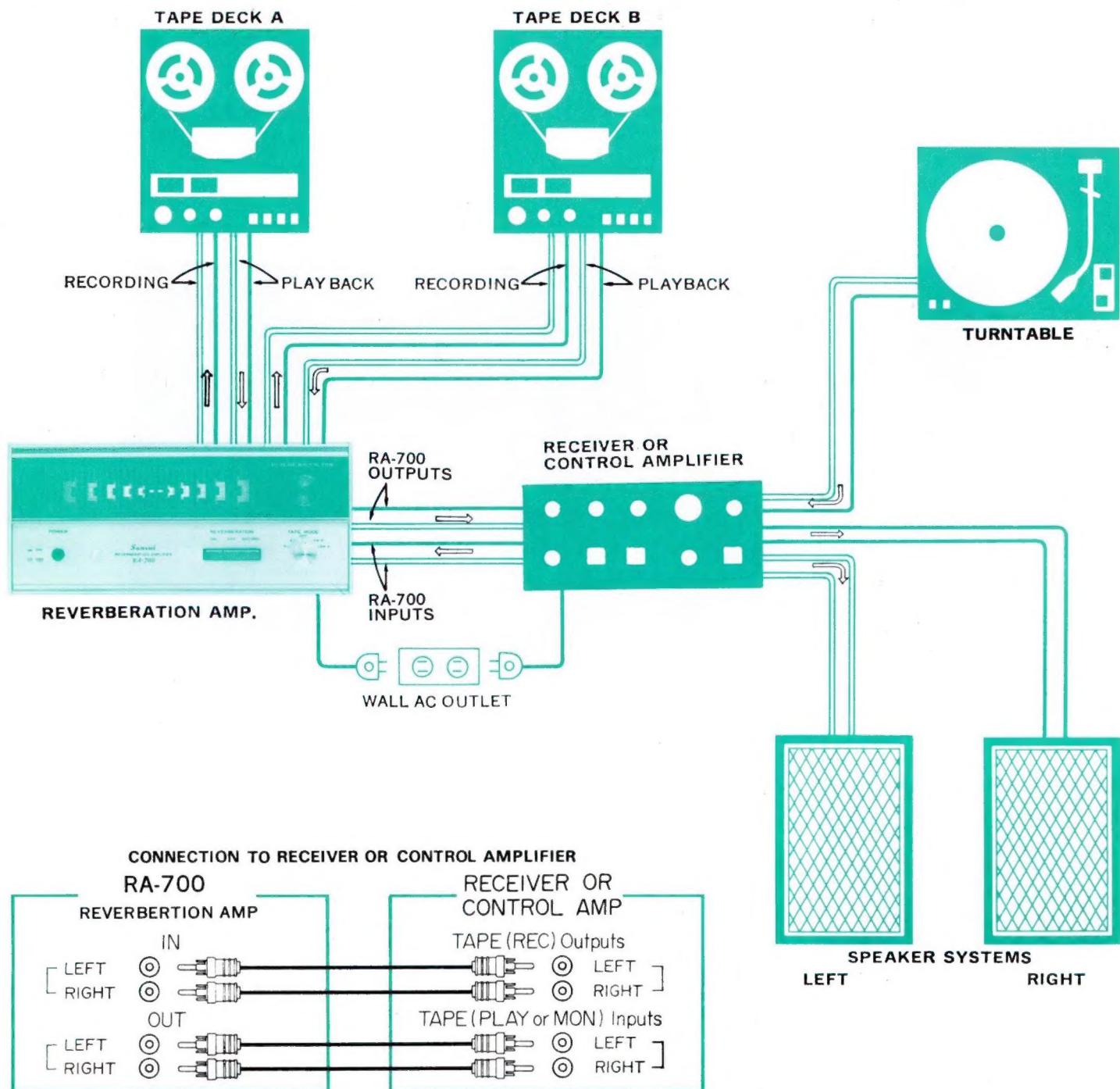
B>A—Use this position to record from the tape deck B to the tape deck A.

CONNECTIONS

GROUNDING



CONNECTIONS / OPERATION



To Reverberate Sound From Any Program Source—Record Player, Tuner or Microphone—Except Tape Deck

1. Set the Tape Monitor switch on the receiver (or control amplifier) to its PLAYBACK or ON position.
2. Turn the Tape Mode selector on the RA-700 to its OFF position.
3. Depress the Reverberation On button.
4. Adjust the Reverberation Time control to the desired reverberation.

To Reverberate Sound From or Through the Tape Deck

Playback

1. Set the Tape Monitor switch on the receiver (or control amplifier) to its PLAYBACK or ON position.
2. Turn the Tape Mode selector on the RA-700 to A or B depending on which jacks are being used for playback.
3. Depress the Reverberation On button.
4. Operate the tape deck in the playback mode.
5. Adjust the Reverberation Time control to the desired reverberation.

Recording

1. Set the Tape Monitor switch on the receiver (or control amplifier) to its PLAYBACK or ON position.
2. Turn the Tape Mode selector on the RA-700 to A or B depending on which jacks are being used for recording.
3. Depress the Reverberation Record button.
4. Operate the tape deck in the recording mode.
5. Adjust the Reverberation Time control to the desired reverberation.

Notes:

- If the Reverberation On button is depressed during the recording process, the original program can be recorded without reverberation

while the reverberated sound comes from the speakers.

- If the Reverberation Off button is depressed during the recording process, no reverberation is added to the sound of the recording nor to the sound from the speakers.

Dubbing

1. Set the Tape Monitor switch on the receiver (or control amplifier) to its PLAYBACK or ON position.
2. When recording from the tape deck A to the tape deck B, turn the Tape Mode selector to A▶B; when recording from the B to the A, turn the selector to B▶A.
3. Depress the Reverberation Record button.
4. Operate one tape deck in the playback mode and another in the recording mode.
5. Adjust the Reverberation Time control to the desired reverberation.

Note: If you want *not* to add reverberation during the dubbing process, depress the Reverberation Off button. If the Reverberation On button is depressed during the dubbing process, the original tape can be recorded without reverberation while the reverberated sound comes from the speakers.

Monitoring

If your tape deck has its own preamplifier as well as separate recording and playback heads, you can monitor the tape instantly after the recording is made and while the recording is still in progress. For use with a two-head tape recorder which can pick up a signal before the recording is made, you can listen to it as well. If a two-head tape recorder which does not employ this arrangement is used for recording, not playback, the Tape Monitor switch on the control amplifier (or receiver) should be set to its SOURCE or OFF position, otherwise no sound comes from the speakers.

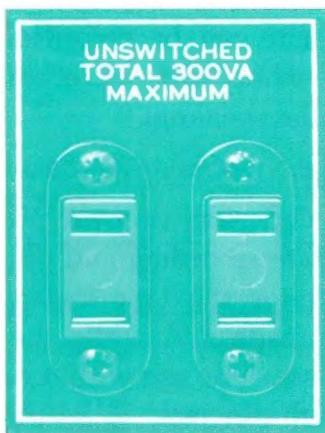
HINTS ON USE/ACCESSORIES

Connections

Be sure to use shielded cable (four connecting cords supplied) to connect a control amplifier and tape decks to the RA-700. The use of an ordinary twin leadwire may cause hum or noise. Always check to see if the connecting cords are plugged firmly and properly into their corresponding output or input jacks. If the connections are loose or in touch with other parts, the RA-700 will not perform normally, and may produce undesirable noise. If used in such a way for a long time, it will eventually break down.

A.C. Outlets

The two a.c. outlets on the rear panel are live at all times and for plugging in a pair of tape decks. The voltage delivered at these AC outlets is the same as the power supply voltage used. They have a maximum capacity of 300 VA total. Never use them beyond their rated capacity.



Power Fuse

If the unit remains completely dead when the power is switched on (the POWER indicator fails to light), the power fuse is probably blown. In this case, remove the line cord from its a.c. outlet and replace the fuse after finding and eliminating the trouble that caused the fuse to blow. Use only an identical glass-tubed fuse. For 100-117 volt operation, a 0.5 ampere fuse is required. For 220-240 volt operation, a 0.3 ampere fuse should be used. Never attempt to use a piece of wire or a fuse of a different capacity as a substitute.



Grounding

Connect one end of vinyl or enameled wire to the terminal screw marked GND on the rear of the amplifier, attach a copper plate to the other end and bury it underground. In all cases, grounding is desirable since it allows a better SN ratio to be obtained. To ground an entire audio system, connect the grounding wire of each component to this terminal.



Voltage Adjustment

To reach the voltage selector, remove the two screws from the nameplate on the rear panel and then remove the nameplate. The voltage selector makes it possible to operate the RA-700 at the correct volt in any area. The volt has been pre-adjusted at the factory, but can be easily readjusted as follows:

1. Set the arrow on the voltage selector plug to the required volt: 100, 117, 220 or 240 volts.
2. The power fuse should also be changed whenever the a.c. line voltage is changed. For 100-117 volt operation, a 0.5 ampere fuse is required. For 220-240 volt operation, the fuse should be changed to a 0.3 ampere fuse.

Note: The voltage selector can be also used to eliminate the trouble caused by the considerable voltage fluctuation. In this case, it should be set to the peak voltage.



Placement

Your RA-700 may be placed in any position where it is convenient to reach. But we recommend to place it away from the speakers because unnatural reverberation or booming noise may be caused.

ACCESSORIES

1. OPERATING INSTRUCTIONS..... 1
2. OPERATING SHEET 1
3. CONNECTING CORDS WITH PIN-PLUGS 4

Operating Instructions Stock No. 9208670

SPECIFICATIONS/BLOCK DIAGRAM

SPECIFICATIONS

RATED OUTPUT VOLTAGE:

300mV (at 1,000Hz, Reverberation time minimum
input level 200mV)

MAXIMUM INPUT VOLTAGE:

3V (at 1,000Hz, Reverberation time minimum)

HARMONIC DISTORTION:

Less than 0.2% (at 1,000Hz, Reverberation
time minimum output level 300mV)

FREQUENCY RESPONSE:

20 to 30,000Hz ± 2 dB
(at Reverberation time minimum)
20 to 30,000Hz ± 10 dB
(at Reverberation time maximum)

SIGNAL TO NOISE RATIO:

65dB (at output level 300mV)

REVERBERATION TIME:

1.9 to 3.2 second (at 1,000Hz)

INPUT IMPEDANCE:

more than 200k ohms (at 1,000Hz)

INPUT AND OUTPUT JACKS:

INPUT	
OUTPUT	
TAPE DECK - A	
TAPE DECK - B	

LOAD IMPEDANCE: 100k ohms

SWITCHES AND CONTROLS:

REVERBERATION MODE:

ON, OFF, RECORD

TAPE MODE:

REC/PLAY-B REC/PLAY-A
A-B DUBBING
B-A DUBBING

POWER REQUIREMENT:

POWER VOLTAGE: 100, 117, 220, 240V
50/60Hz

POWER CONSUMPTION: 9W (rated)

SEMI-CONDUCTORS: Transistors: 11 Diodes: 3

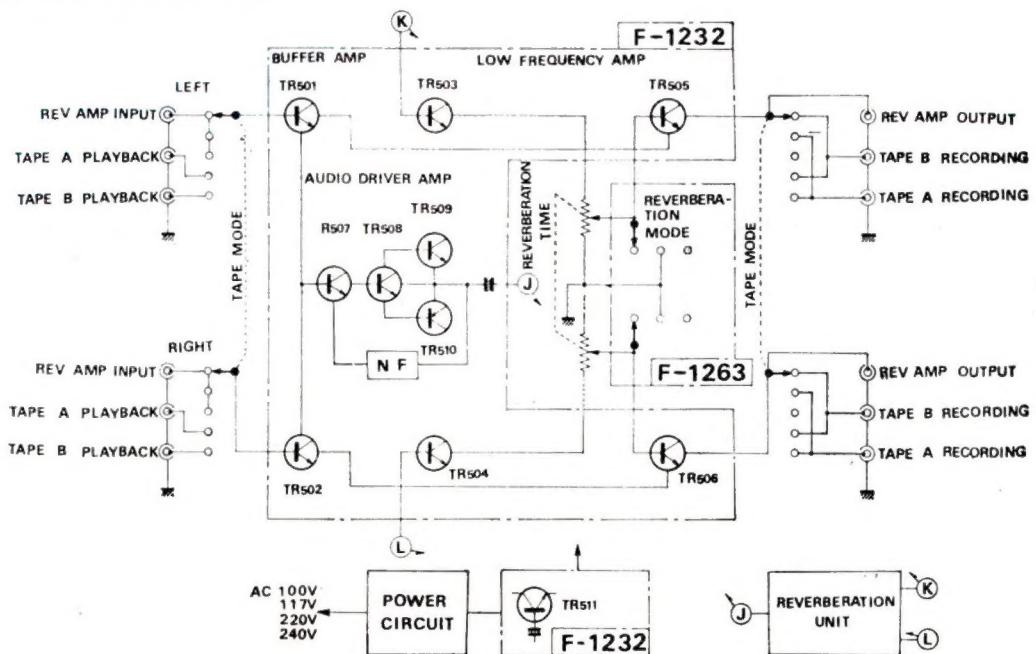
DIMENSIONS: $11\frac{1}{16}$ "(280mm) W,
 $4\frac{15}{16}$ "(125mm) H,

$10\frac{7}{16}$ "(264mm) D

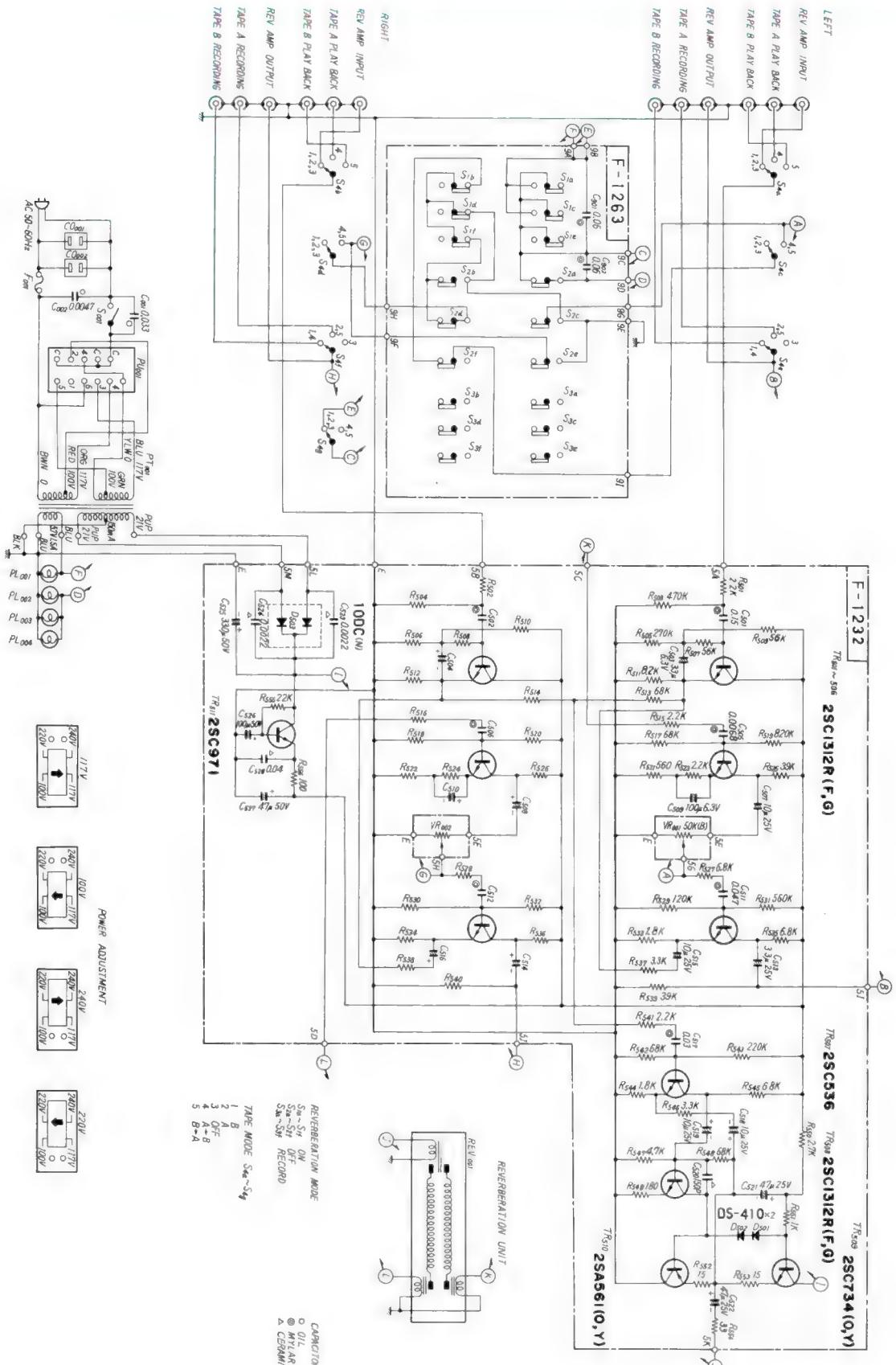
WEIGHT: 9.3 lbs (4.2kg) Net
11.9 lbs (5.4kg) Packed

*Design and specifications subject to change
without notice for improvements.

BLOCK DIAGRAM



SCHEMATIC DIAGRAM





Sansui

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Printed in Japan (N4M100)

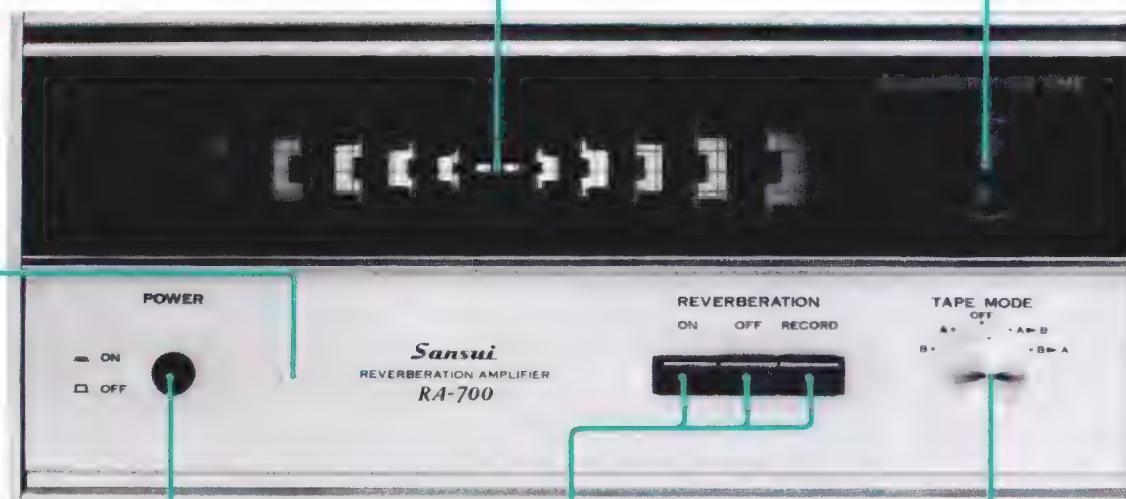
SANSUI RA-700 OPERATIONS

REVERBERATION INDICATOR

The reverberation indicator is illuminated when the Reverberation On or Record button is depressed. The two rainbows, one inverted, draw sharply and distinctly apart as the reverberation time is shortened.

POWER INDICATOR

The power indicator is lit when the Power switch is turned on. It remains lit while the amplifier is on.



POWER SWITCH

Push this switch once to turn the power on; push it again to turn the power off.

REVERBERATION PUSHBUTTONS

ON—Depress this button to add reverberation to any program source. If it is depressed during the recording process, the recording is made without reverberation but only the sound from the speakers is reverberated.

OFF—Depress this button if you want not to add reverberation during the recording process or while listening to records, radio broadcasts or tapes.

RECORD—Depress this button to add reverberation to the sound of the recording.

CAUTION: Never attempt to lay this sheet on the amp because the heat diffusion effect is largely reduced.

REVERBERATION TIME CONTROL

Use this control to adjust the reverberation time while watching the reverberation indicator. To lengthen the time, turn it clockwise; to shorten the time, turn it counterclockwise.

TAPE MODE SELECTOR

B—Use this position to record on, or play back through, the tape deck connected to the TAPE DECK B jacks.

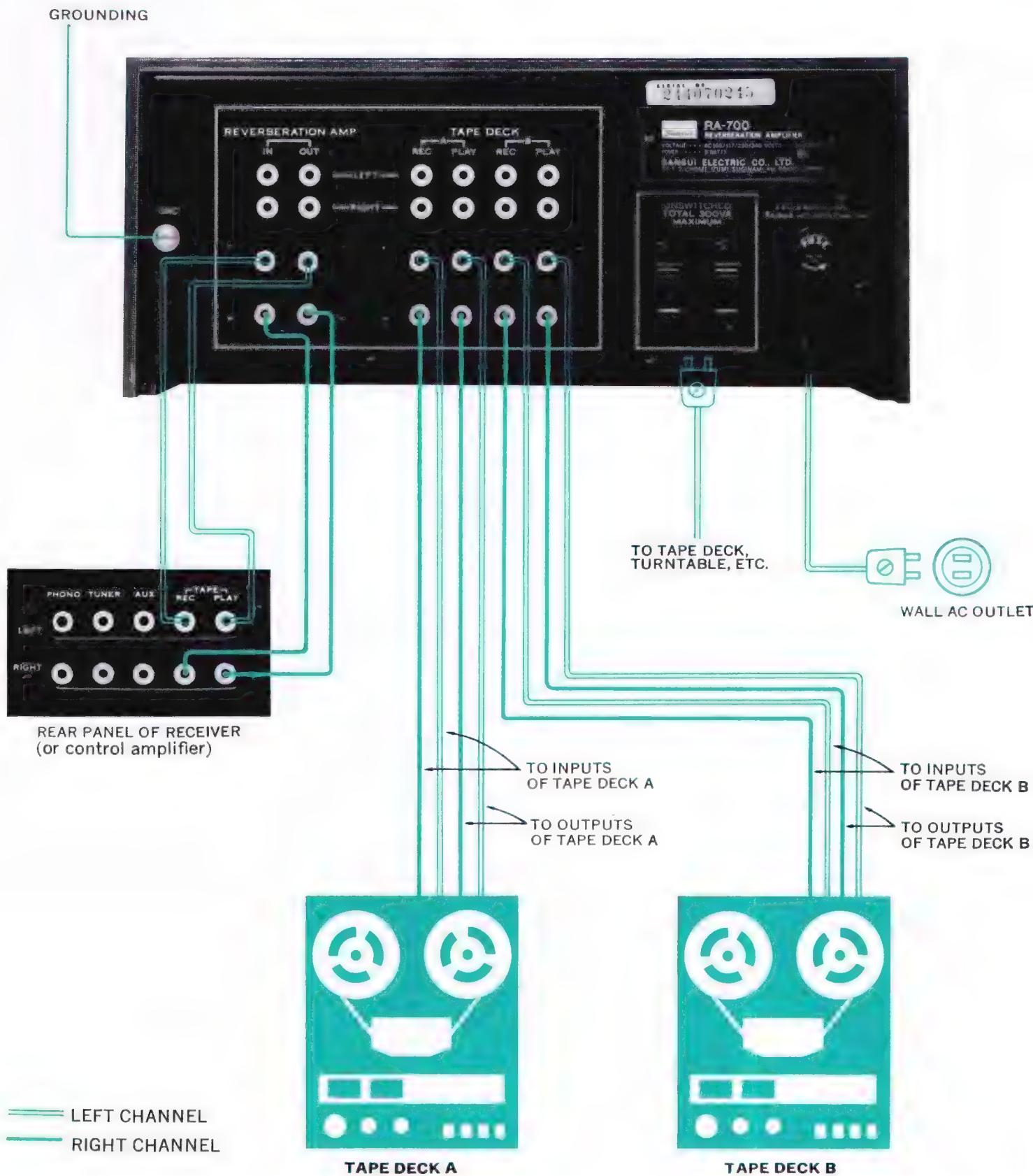
A—Use this position to record on, or play back through, the tape deck connected to the TAPE DECK A jacks.

OFF—Use this position to provide reverberation effects to a program source set up on the receiver (or control amplifier) connected to the RA-700. With the selector switched to this position, the reverberation amplifier is disconnected from the tape deck circuits.

A▶B—Use this position to record from the tape deck A to the tape deck B.

B▶A—Use this position to record from the tape deck B to the tape deck A.

SANSUI RA-700 CONNECTIONS



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14-1, 2-chome, Izumi, Suginami-ku, Tokyo 168, Japan.
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Stock No. 9228670 Printed in Japan (N4M100)

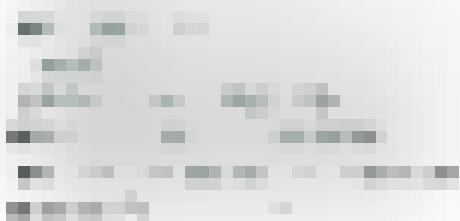
Sansui

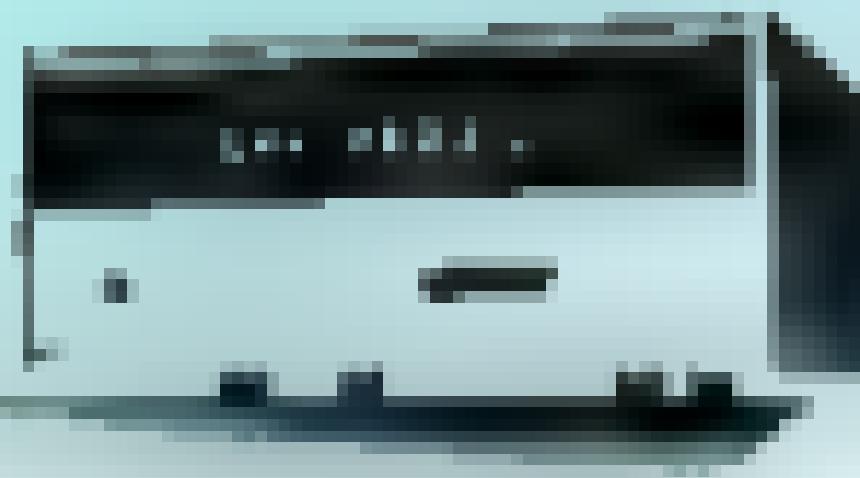
SANSUI ELECTRIC CO., LTD.





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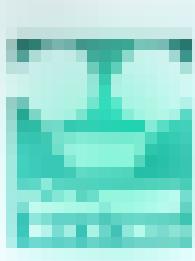
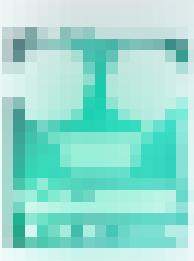
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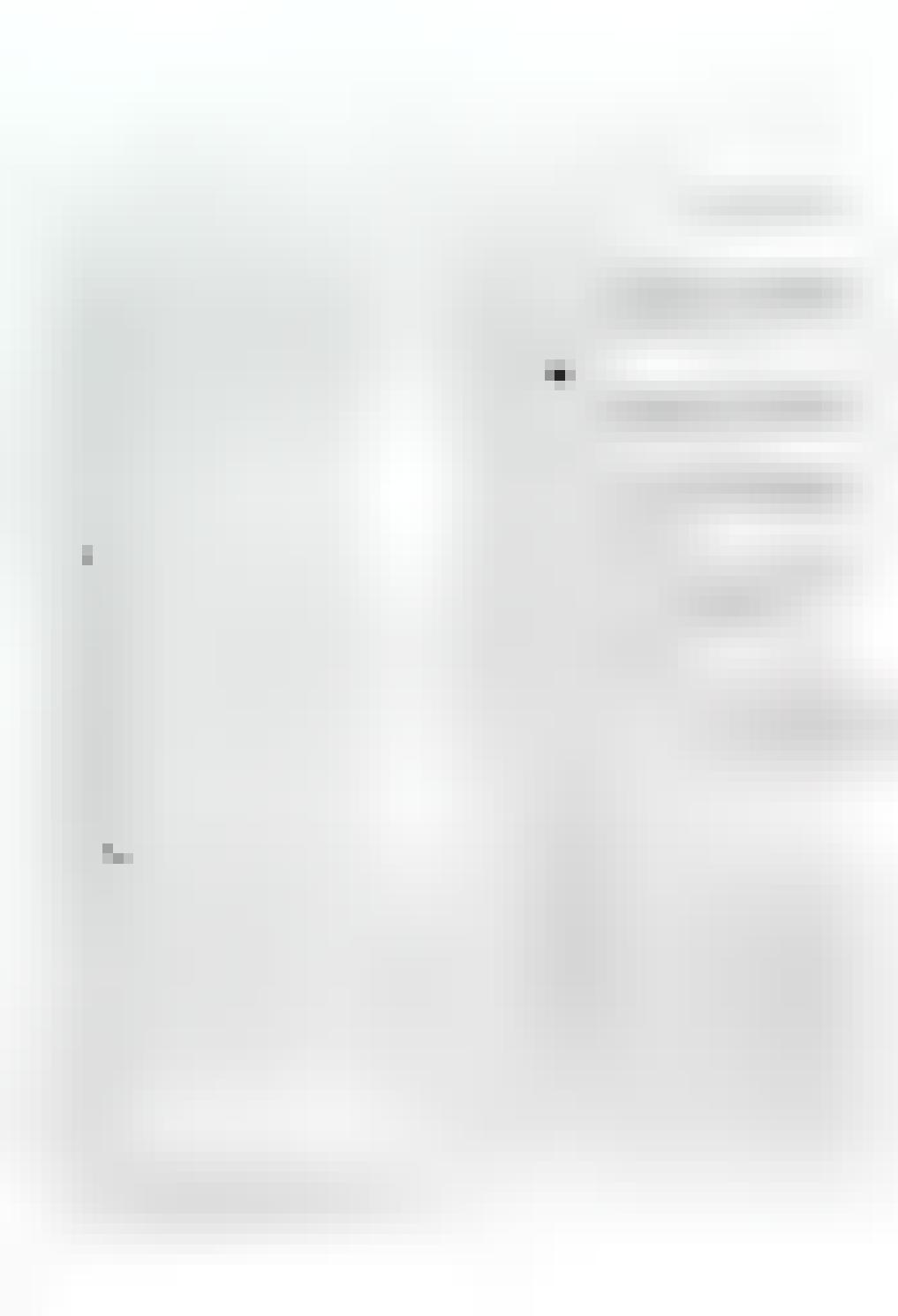
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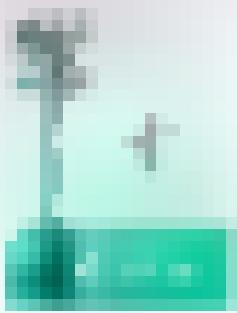
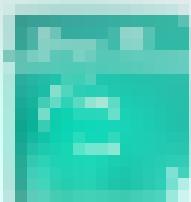
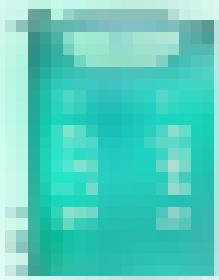
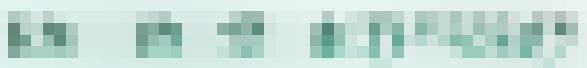
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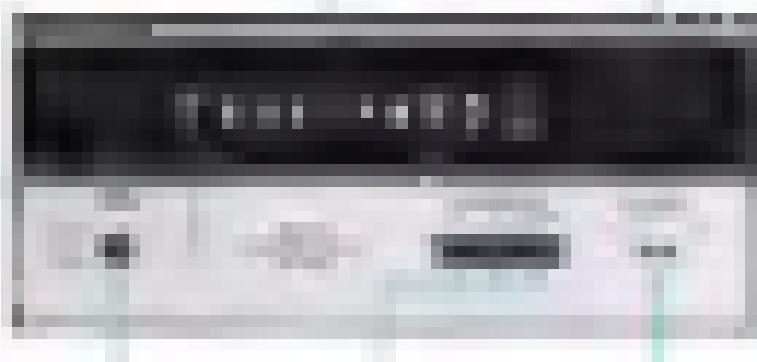
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ANSWER

the first time in the history of the world, the people of the United States have been called upon to determine whether they will submit to the law of force, or the law of the Constitution. We shall not shrink from that great responsibility. We shall meet the question in a spirit of perfect freedom and坦率, and with a determination that the right shall triumph.



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